RPCM R&R NOD101

OBJECTIVE:

Remove a failed RPCM and replace it with a spare.

LOCATION:

Installed: NOD1O1 Stowed: √ Maint DBase

DURATION:

30 minutes (If Alcove Shear Panels have been removed)

PARTS:

RPCM-Int Type V (P/N R077419-31)

MATERIALS:

Wet wipes Plastic bag

TOOLS REQD:

Equip bag

Tethers

Kit E:

Ratchet 3/8" Drive

6" Ext 3/8" Drive

Driver Handle 1 /4" Drive

Kit D:

5/32" Hex Head Driver, 1 /4" Drive

EVA Kit:

7/16" x 6" Wobble Socket Extension, 3/8" Drive

Kit G:

(5-35 in-lbs) Trq Driver

(30-200 in-lbs) Trq Wrench

REFERENCED PROC(S):

RPCM SAFE FOR MAINTENANCE NODE1 ALCOVE OVHD SHEAR PANEL REMOVAL ACTIVATE RPCM

SAFE

WARNING

Failure to remove power can result in electrical shock hazard.

- 1. Don Anti-Static wrist tether.
- 2. Perform RPCM SAFE FOR MAINTENANCE procedure.

ACCESS

- 3. Remove alcove ovhd close-out panel, fasteners (ten) (Handle 1 /4" Drive, 5/32" Hex Head Driver)(Tempry stow).
- 4. If Alcove Ovhd Shear Panels have not been removed Perform NODE1 ALCOVE SHEAR PANEL REMOVAL procedure

Else Go to step 5.

REMOVE

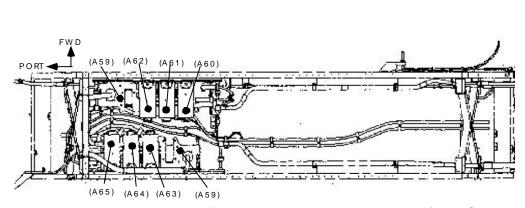


Figure. 1. Nadir View of Node 1 Forward Nadir Alcove(with Closeout and Shear Panel Removed).

Table 1. Node 1 Alcove Ovhd RPDA/RPCM Identification

| Name | Ref. Designator | RPCM Type |
|---------------|-----------------|-----------|
| RPDA N1-RS1 | (A64) | N/A |
| RPCM N1-RS1-A | (A65) | V |
| RPCM N1-RS1-B | (A66) | V |
| RPCM N1-RS1-C | (A67) | V |
| RPDA N1-4B | (A59) | N/A |
| RPCM N1-4B-A | (A60) | V |
| RPCM N1-4B-B | (A61) | V |
| RPCM N1-4B-C | (A62) | V |

4. Locate failed RPCM. See Figure 1. and Table 1.

CAUTION

Failure to fully seat 7/16" x 6" Wobble Socket Extension, apply constant pressure on drive screw could result in damage to RPCM locking mechanisms.

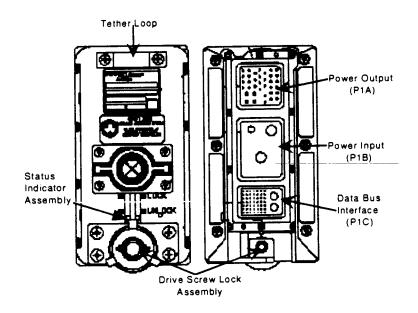


Figure 2. Remote Power Control Module (Front & Back)

- 6. Apply pressure, loosen failed RPCM drive screw (Ratchet 3/8" Drive, 7/16" x 6" Wobble Socket Ext).
- 7. √ Status indi UNLOCK
- 8. Label, remove failed RPCM from receptacle by sliding it off guide rails.
- 9. Verify replacement RPCM part number RPCM-Int Type V (P/N R077419-31).
- Remove electrical connector protective caps (two) from replacement RPCM, install on failed RPCM, (Tempry stow failed RPCM).

REPLACE

11. Inspect RPCM and mounting location for foreign matter/debris, damage to alignment guides, pins.

12. Clean coldplate bonding surface with wet wipes.

CAUTION

All internal RPCMs have the same physical characteristics. Forcing incorrect spare RPCM into receptacle could bend RPCM connector pins.

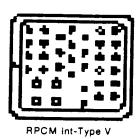


Figure 3. RPCM Power Out Connector (Node1)

- 13. Verify replacement RPCM Power Out connectors pins. See Figure 3.
- 14. Position replacement RPCM on guide rails of RPDA.
- 15. Insert RPCM into RPCM receptacle until status indicator reaches UNLOCK position.

CAUTION

Failure to fully seat 7/16" x 6" Wobble Socket Extension, apply constant pressure on drive screw could result in damage to RPCM locking mechanisms.

- 16. Apply pressure, tighten RPCM drive screw, torque to 60 +/- 6 in-lbs (Ratchet, 3/8" Drive, 7/16" x 6" Wobble Socket Ext, (30-200in-lbs)Trq Wrench).
- 17. √ Status indi LOCK

CHECK-OUT

18. Perform ACTIVATE RPCM procedure.

CLOSE-OUT

19. Install zenith closeout panel. Fasteners (ten), torque to 14 +/- 2 in-lbs (Handle 1 /4" Drive, 5/32 "Hex Head Driver, (5-35 in-lbs) Trq Driver).

POST MAINTENANCE

- 20. Stow failed RPCM, tools, equipment.
- 21. Update Maint Dbase.